

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Bid Receiving - PWGSC / Réception des soumissions
- TPSGC
11 Laurier St./ 11, rue Laurier
Place du Portage, Phase III
Core 0A1 / Noyau 0A1
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address
Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
Clothing and Textiles Division / Division des
vêtements et des textiles
11 Laurier St./ 11, rue Laurier
6A2, Place du Portage
Gatineau, Québec K1A 0S5

Title - Sujet PANTS, CARGO, MALE AND FEMALE	
Solicitation No. - N° de l'invitation 47419-152421/A	Amendment No. - N° modif. 001
Client Reference No. - N° de référence du client 1000322421	Date 2015-02-06
GETS Reference No. - N° de référence de SEAG PW-\$\$PR-724-66519	
File No. - N° de dossier pr724.47419-152421	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2015-03-16	Time Zone Fuseau horaire Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Sloan, Kim	Buyer Id - Id de l'acheteur pr724
Telephone No. - N° de téléphone (819) 956-5379 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

This Solicitation Amendment is published to update the Purchase Description CBSA/ASFC-2012-09-110, to extend the period of the Solicitation to March 16, 2015 and to answer to questions that have been raised by suppliers.

Delete Annex "B" - CBSA/ASFC-2012-09-110 dated 2014-12-18 in its entirety and replace it with Annex "B" - CBSA/ASFC-2012-09-110 dated 2015-01-26 attached.

Delete all references in the Request For Proposal to CBSA/ASFC-2012-09-110 dated 2014-12-18 and replace it with CBSA/ASFC-2012-09-110 dated 2015-01-26.

Questions & Answers

Q1 Does the Tuff Twill from Doubletex have a moisture wicking or any other soil resistant finish

A1 The amended specification references a new material requirement, therefore the tuff twill fabric is obsolete.

Q2 Can I use another twill fabric that is the same weight and same properties from another supplier

A2 As stated in the note below Table 1.

Others Manufacturers' fabrics shall be acceptable provided test data is submitted to verify its compliance.

Q3 The actual knee pads do I have to sully [sic] these with the pants? If so do you know where I can purchase these?

A3 The knee pads are to be made of material specified in para 5.1.12 identified as **Knee Pads** to the dimensions specified in drawing 4.

Q4. Since we are not able to see the actual sample, may I know the pantone color for the dark navy fabric? There is no color guideline indicated in the RFP.

A4. Refer to Pantone Textile Color System 19-4013 TCX. The successful bidder will be sent a colour swatch of the material.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.



Canada Border
Services Agency

Agence des services
frontaliers du Canada



Pants, Cargo, Male & Female

Purchase Description



File no. CBSA/ASFC-2012-09-110
Date of issue: 2015-01-26

PROTECTION • SERVICE • INTEGRITY

Canada

PURCHASE DESCRIPTION

PANTS, CARGO, MALE & FEMALE

1. SCOPE

This purchase description describes the requirement for materials, design, construction and inspection of a male and female cargo pocket pant for use by Border Service Officers (BSO) within the Canada Border Services Agency (CBSA).

2. GENERAL REQUIREMENTS

- 2.1. **DESIGN** - The cargo pant shall be constructed from a poly/cotton material as specified in "Table I" attached. The overall design of the pants shall incorporate the following features: Two reinforced slash front pockets with an opening for an accessory pocket; two bellows style double pleated cargo pockets with hidden buttons and hook and loop closures; two concealed, inside cargo pockets, with slide fastener closures incorporating a vertical entrance on the left pocket and horizontal entrance on the right pocket; D-ring tab under right cargo pocket flap; two rear welt pockets with buttons; expandable waistband with rubber gripper; double knees; neoprene knee pads and unfinished leg bottoms.
- 2.2. All articles or materials covered by this purchase description shall be free from imperfections or blemishes such as may affect its appearance or serviceability.
- 2.3. In the event of any inconsistency in the contract documents, purchase description, drawings, or sealed samples. The aforementioned shall prevail in the following order:
 - I) Contract
 - II) Purchase Description
 - III) Drawings
 - IV) Sealed Sample

3. SEALED SAMPLE

A sealed sample, identified by the purchase description number noted in the contract, will be supplied to the successful tenderer if available. This will constitute the standard in regards to any properties not identified within. Variation from the purchase description may appear in the sample in which case the purchase description shall govern unless otherwise identified on the sealed sample tag.

The sealed sample will be sent “prepaid” and is to be returned “prepaid”.

The sealed sample is to be returned to CBSA in the same condition as received by the manufacturer. Lost or damaged sealed samples shall be replaced by an identical item or the CBSA shall be reimbursed for the cost of an acceptable replacement.

4. APPLICABLE SPECIFICATIONS

- 4.1. CAN/CGSB 4.2, Textile Test Methods.
- 4.2. CAN/CGSB-4.1, 131-93 Thread, Polyester, Polyester-Covered.
- 4.3. ISO 4915, International Standard for Textiles - “Stitch Types”.
- 4.4. ISO 4916: 1991, International Standard for textiles “Seam Types”.
- 4.5. CAN/CGSB-86.1, Standard for Care Labeling of Textiles.

5. DETAILED REQUIREMENTS

5.1. MATERIALS

- 5.1.1. **Shell Material** - As per “TABLE I” attached.
- 5.1.2. **Lining Material (Waistband)** - Plain weave poly/cotton material, mass of $95\text{g/m}^2 \pm 5\%$. The colour shall be black or navy to match the shell material and meet no less than Grade 3 on the grey scale after 5 washes for Colourfastness to Laundering (CAN/CGSB-4.2 Method 19.1M90 Test 2) with a maximum shrinkage of no more than 3%. **Certification of Compliance required for lining material used.**

- 5.1.3. **Seam & Stitching Thread** - Shall be polyester core, polyester wrap, Class B, R50 Tex, Type 1 Soft of matching colour, meeting CAN/CGSB 4.131-93.
- 5.1.4. **Buttonhole and Bar-Tack Thread** - Shall be polyester core, polyester wrap, Class B, R50 Tex, Type 1 Soft of matching colour, meeting CAN/CGSB 4.131-93.
- 5.1.5. **Buttons** - Rear pockets, fly button tab, and back crotch seam for large belt loop shall have a plastic, four-hole, 15mm, of matching shade to the shell material. Fly fronts and cargo pockets shall have 19mm nylon composition Military strap button, of matching shade to the shell material.
- 5.1.6. **Bar Tacks** - The bar tacks for the fly fronts and pockets shall be 13 mm in length with no less than 18 cover stitches per tack. Belt loop bar tacks shall be 17mm in length.
- 5.1.7. **Slide Fastener (Fly front)** - Shall be a closed ended, black oxide slide fastener with Y type teeth 4.5mm chain width. There shall be a semi-locking slider complete with a stainless steel locking pin, and black oxide colored pull tab. The tape shall be comprised of polyester yarn and shall be black in colour. One bottom stop shall be used with a minimum of one top-stop. The length of the slide fasteners shall be as outlined below. (measured from the top end of the slider to the tip of the bottom stop) YKK-459½ is known to meet this requirement. **Certification of Compliance required.**

RISE	Male Lengths - In inches	Female Lengths - In inches
Short	6½"	6"
Regular	7"	6½"
Tall	7½"	7"

- 5.1.8. **Slide Fastener (Inside Pocket)** - Black, closed end, size 3 coil type slide fastener, with a semi-automatic locking slider.
- 5.1.9. **Waist-banding** - Shall be made from waistband lining as specified in para 5.1.2 and shall have a finished width of 6cm (2 3/8"). The waist-banding shall be constructed with the following components, a rubber inner grip, non-woven interlining and no-roll reinforcement. The rubber inner grip shall have a finished width of 1.27cm (1/2"). The waist-banding shall meet a grey scale of 3 minimum and be washable up to 60° C with a maximum shrinkage of no more than 3%.

- 5.1.10. **Hook and Loop Tape** - Shall be woven nylon, black in colour, with a high life cycle. The width shall be 2.5cm (1") with lengths as specified in the purchase description and drawings. The combined hook and loop shall have no less than 8 P.S.I length-wise shear strength and initial peel strength shall of not less than 1 P.I.W and after 1000 cycles.
- 5.1.11. **Elastic** - Used in the construction of the waistband. Commercially available, black knitted elastic, non-roll, and pre-shrunk, equal in respect to the sealed sample for durability, stretch and recovery. It shall be 2.5cm wide (1") in width.
- 5.1.12. **Knee Pads** - Two knee pads shaped and dimensioned to the sealed sample shall be made from 5mm thick Neoprene, black in colour equal in all respects to the sealed sample.
- 5.1.13. **D-Ring** - Commercially available flat plastic d-ring, 2.5cm (1"), black in colour.
- 5.1.14. **Webbing (D-ring tab)** - Commercially available, nylon webbing, 2.5cm (1") wide, black in colour.

6. GENERAL CONSTRUCTION

- 6.1. **Cutting and Assembly** - All garment pieces are to be cut from the same dye-lot of shell material as specified in para. 5.1.1. There shall be no discernible difference in shade between fabric components of the finished garment.
- 6.2. **Stitching** - Sewing shall be lock or lock chain stitch unless otherwise specified. There shall be not less than four or no more than five stitches per centimeter with the beginning and ending of all seams securely backstitched. All raw edges shall be serged. The stitches shall be regular and even, free from skipped stitches or other stitching malfunctions that may result from poor machine tension. Pant outseams shall be stitched, serged and single top-stitched in accordance with ISO4616:1991 serging type#6.01.01 (edge finishing) and seam type #2.02.04. Inseams shall be constructed in accordance with a plain seam type #1.01.01 and serging type #6.01.01(edge finishing) of ISO 4916:1991.
- 6.3. **Pressing and Shaping** - The pants shall be pressed and shaped in accordance with good commercial practice to conform to the shaping and style of the sealed sample.

7. CONSTRUCTION

- 7.1. **Waistband** - The waistband shall be constructed from a combination of shell material as specified in para 5.1.1 and waist-banding as specified in para 5.1.9. The outside face of the waistband shall have a finished width of no less than 5cm with the inside waist-banding measuring 6cm. The front-left and front-right of waistband above the front pockets shall expand and retract by the use of elastic as specified in para 5.1.11. The waistband shall contain six (6) 2cm wide belt loops evenly spaced with a functional opening of 6.5cm. The bottom edge of belt loops shall be bar tacked with bar tacks as specified in para 5.1.6. A large size back belt loop shaped and dimensioned as per dwg 3 shall be sewn securely to the center back crotch seam. Two buttons as specified in para 5.1.5 shall be sewn to the seat seam at 6.5cm and 9cm from the top of the waistband for the attachment of the large belt loop.
- 7.2. **Fly Front Opening** - The front of the pants shall close by a means of a military strap button and corresponding buttonhole as specified in para 5.1.5. A button tab containing a button-hole, shall be sewn to the inside fly with the corresponding button sewn to the inside left front of the waistband lining. The slide fastener, as specified in para 5.1.7 shall be applied to the pants using good commercial practices and shall reflect the sealed sample. The completed waistband and fly front opening shall conform in all respects to the drawings and sealed sample.
- 7.3. **Pockets**
- 7.3.1. **Front Pockets** - There shall be two front pockets constructed from material as specified in para 5.1.1. The pockets shall have slanted openings with the top finishing equal to the front expandable portion of the waistband. The bottom edges shall be reinforced with a single layer of shell material as specified in para 5.1.1. An accessory pocket, created by stitching a compartment into the pocket bag, shall be incorporated into the horizontal opening on the bottom edge of the pocket. Bar-tacks shall be applied to secure the pocket openings as shown in dwg 2. All raw edges shall be stitched and serged. The ends of the pockets shall be bar-tacked as shown in the drawings.
- 7.3.2. **Back Pockets** - Two back double welt pockets lined with material specified in para 5.1.1., shall have functional openings of 13.9cm (5 ½”) for male sizes and 13.2 cm (5 ¼”) for female sizes. The pockets shall be bar-tacked at each end of the openings and shall be equipped with a button as specified in para 5.1.5, and a suitably sized buttonhole centered on the pocket opening. The pockets shall conform in all respects to the drawings.

- 7.3.3. **Cargo Pockets (bellows style)** - Shall be constructed from shell material as specified in para 5.1.1 and dimensioned as per the drawings. The cargo pocket shall come complete with flaps. Two 2.5cm (1") vertical pleats shall be built into each the bellow pocket bag. The pocket pleats shall be edge stitched through its full length using a 1.6mm (1/32") gauge. The pockets shall be applied centered on the leg and stitched using a 1.6mm (1/32") gauge so that the bellows are facing towards the back of the pants. The bottom of both cargo pockets are to be sewn flat to the legs. Two pieces of loop tape 2.5cm x 2.5cm (1" x 1") wide as specified in para 5.1.10 shall be applied to the cargo pocket as shown in the drawings with its corresponding two pieces of hook tape applied to the flap. The completed cargo pocket shall conform in all respects to the drawings.
- 7.3.4. **Inner Pocket** - Concealed under the bellow style cargo pocket shall be made from a single layer of shell material as specified in para 5.1.1 edge stitched to the trouser leg. The inner pockets shall be closed with a slide fastener as specified in para 5.1.8 with length equivalent to the pocket. The inner pocket sewn to the **right** leg shall have the slide fastener applied in a horizontal position allowing access through the opening of the top of the cargo pocket. The **left** leg shall have the inner pocket sewn so that the slide fastener is applied in a vertical position with access to the inner pocket via the center front portion of the cargo pocket as shown in dwg 2.
- 7.3.5. **Pocket Flaps** - The flaps constructed from shell material as specified in para 5.1.1 shall be dimensioned as per the drawings and sealed sample. All outer edges of the flaps shall be stitched using a 6.3mm (1/4") gauge. The bottom edges of the flaps shall be squared off. A 2.5cm x 2.5cm (1" x 1") wide piece of hook tape as specified in para 5.1.10 shall be applied to the flap as shown in the drawings. As identified in dwg 2, there shall be a button-hole flap with buttonhole, sized to fit the military strap button specified in para 5.1.5 sewn to the inside ply of the pocket flap. The pocket flaps after being applied to the pants shall be bar tacked on each corner. The flaps shall conform in all respect to the drawings and sealed sample.
- 7.4. **Crotch and Seat Seam** - The crotch and seat seam shall be joined together by stitching the seat seam in a continuous operation from the crotch through to the waistband. All seams shall be serged and **double stitched** using a 401 lockchain stitch. The crotch seam shall be finished so as to allow for easy alterations. The crotch lining constructed as part of the zipper curtain shall be a continuously to support the crotch seam and continue from the front crotch through to the curve on the back crotch. A minimum of 4.5cm (1 3/4") alteration room shall be accounted for at the top of the waistband. The finished crotch and seat seam shall conform in all respects to the drawing.

- 7.5. **Crotch Lining** - The front of the inside crotch shall be lined with a triangular piece of lining, shaped and dimensioned as per dwg 4.
- 7.6. **Knee Patches** - Each leg shall be equipped with an outer knee patch constructed from shell material as specified in para 5.1.1. The knee patches shall extend from inseam to outseam and be stitched using a 1.6mm and 6.3mm gauges. The inseam of the trouser leg under the knee patch shall contain a 12cm (4 3/4") opening to allow for the insertion of the neoprene knee pad as specified in para 5.1.12. The finished knee patches, inseam and trouser leg shall conform to the drawing and sealed sample.
- 7.7. **Inseam** - The back leg inseam at the crotch shall have a 3.5cm wide seam allowance with a 1cm seam allowance towards the hem. The seam allowance shall continue a minimum length of 35cm for females and 40cm for males and be pressed open when finished.
- 7.8. **Outseam** - The pant outseam shall be stitched, serged and single top-stitched equal in respect to the sealed sample.
- 7.9. **Hem** - The bottom hem of both legs shall be serged and left unfinished. The completed legs shall conform in all respects to the drawings and sealed samples.

8. LABELLING

- 8.1. All labeling must be in a bilingual format. The text on all labels shall be of permanent inks of a contrasting colour which shall remain visible and withstand a minimum of 40 washes.

NOTE: A polyurethane adhesive heat transfer label for the Cleaning Instructions is permitted as an alternative to the sewn on label provided they meet the above requirements.

8.2. Identification Labels

- a. Size Designation (as referenced in the contract documents)
- b. Fibre Content
- c. Manufacturers' Name & Contract #
- d. Material Master Number (reference contract documents)

8.3. Cleaning Instructions

- a. Machine wash - warm (40°C)
- b. Do not bleach
- c. Tumble dry - low
- d. Do not use Fabric Softeners or Dryer Sheets

9. TECHNICAL INSPECTION

The contractor shall be responsible for the performance of all inspections and tests necessary to demonstrate that the materiel and services being supplied conform to the requirements of this purchase description. This may be accomplished by performing the test specified in this purchase description or by demonstrating to the satisfaction of the CBSA, Technical Authority that conformity to the purchase description and manufacturing process is assured. The contractor may use any independent, ISO 9001 certified and ISO 17025 "Textile" certified testing facilities acceptable to the CBSA Technical Authority. Certification documents will be required.

The CBSA Technical Authority reserves the right to perform any inspection considered necessary to ensure the materials and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery not exceeding two percent or two out of any number delivered fewer than 100 may be put to tests that could destroy the articles. If found to be inferior or not in accordance with this specification, all articles so destroyed shall be replaced by others of proper quality at the expense of the contractor. The entire delivery may also be rejected if it is found that articles previously rejected due to non-repairable defects are redelivered for inspection.

The contractor will be promptly notified when any articles are not accepted and such articles will be returned at the contractor's risk and expense.

10. DELIVERY, PACKING & MARKING OF CONTAINERS

It is the responsibility of the manufacturer to ensure that goods are packaged in a suitable manner to be delivered in an undamaged condition. Any goods received in a damaged condition will be returned to the manufacturer for replacement at his full cost.

Packing and marking of shipping containers shall be as specified in the invitation to tender.

A packing slip shall be enclosed showing the contents of each shipment.

The contractor shall also identify clearly on the outside of each package (box) the following items:

- Size
- Material Master Number
- Quantity of each size contained in the box
- Contract Number

11. APPENDICES

TABLE I - Shell Material Requirements

SCALES OF MEASUREMENTS - Male & Female

DRAWINGS - Appendix

TABLE I - SHELL MATERIAL

	SPECIFICATION	TESTED BY CAN-2-4.2
Colour	Dark Navy Equivalent to the sealed sample	
Weave	Ripstop	
Fibre Blend	Polyester 65% \pm 3% Cotton 35% \pm 3%	
Mass	300g/m ² \pm 5%	Method 5.1-M90
Width	160 cm (min.)	Method 4.1-M87
Yarns per cm	Warp 42 \pm 2 Weft 18 \pm 2	Method 6-M89 Method C
Breaking Strength (Grab Method)	Warp 1000 Newtons (min.) Weft 550 Newtons (min.)	Method 9.2-M90
Tearing Strength (Single Rip Method)	Warp 45 Newtons \pm 10 Weft 25 Newtons \pm 10	Method 12.1-M90
Dimensional Change in Domestic Laundering of Textiles <i>After 1 cycle</i>	Warp 2% (max.) Weft 2% (max.)	Method 58-2004 Washing Procedure I
Colourfastness to Washing <i>Colour Change & Staining Polyester & Cotton</i>	Colour Change - Grey Scale 4 min. Staining Cotton - Grey Scale 3-4 min. Staining Polyester - Grey Scale 2-3 min.	Method 19.1-2004
Colourfastness to Light	At least AATCC L4	Method 18.3-97
Colourfastness to Perspiration <i>Colour Change & Staining Polyester & Cotton</i>	Colour Change - Grey Scale 3 min. Staining - Grey Scale 4 min.	Method 23-M90-2004
Colourfastness to Crocking Wet: Dry:	Wet Staining: Grey scale 3 or better Dry Staining: Grey scale 4 or better	Method 22-2004
Pilling	after 90 mins - no less than 4 after 120 mins - no less than 4	Method 51.2-M87
Abrasion <i>after 5000 cycles</i>	Colour Change - no less than 4 Appearance - no less than 3	ASTM D4966-89
Crease Recovery <i>Face side out</i>	warp - 65% (min.) weft - 70% (min.)	Method 45-M88-2001
Water Repellency (Fabric Face) <i>Initial After 3 washes After 10 washes</i>	100% min. 90% min. 70% min.	Method 26.2-94/ ISO 4920:1981
Absorbency of Textiles (Fabric Back)	50% - 70% min.	Method 26.2-94/ ISO 4920:1981
Free Formaldehyde Content	<75 ppm	Method 63.3-M91
Finish	Fluorochemical finish with Water & Stain Protection	

Note: For information purposes, Doubletex (Montreal, Quebec) "PANAMERA SD35S H3-OUT" 65/35 Poly/cotton is known to meet this specification. Other Manufacturers' fabrics shall be acceptable provided test data is submitted to verify compliance.

SCALES OF MEASUREMENTS – Pants, Cargo, Male

SIZE DESIGNATION		BODY MEASUREMENTS			FINISHED GARMENT MEASUREMENTS									
		WAIST		SEAT		Waistband Circ.	Waistband Circ. Stretched	Seat Circ.	Bottom (½ only)	Front Rise	Back Rise	Crotch Depth (outseam minus inseam)	Outseam (bottom of waistband to hem)	Inseam
		Inches	cm	Inches	cm									
<u>SHORT RISE</u>	26	26	66	33	84	69.00	75.00	86.25	25.25	25.75	33.25	20.00	115.00	95
	28	28	71	35	89	74.00	80.00	91.25	25.50	26.00	33.75	20.25	115.25	95
	30	30	76	37	94	79.00	85.00	96.25	25.75	26.25	34.25	20.50	115.50	95
	32	32	81	39	99	84.00	90.00	101.50	26.00	26.50	34.75	20.75	115.75	95
	34	34	86	41	104	89.00	95.00	106.50	26.25	26.75	35.25	21.00	116.00	95
	36	36	91	43	109	94.00	100.00	111.50	26.50	27.00	35.75	21.25	116.25	95
	38	38	96.5	45	114	99.50	105.50	116.75	26.75	27.25	36.25	21.50	116.50	95
	40	40	101.5	47	120	104.50	110.50	121.75	27.00	27.50	36.75	21.75	116.75	95
	42	42	106.5	49	124.5	109.50	115.50	126.75	27.25	27.75	37.25	22.00	117.00	95
	44	44	111.5	51	129.5	114.75	120.75	132.00	27.50	28.00	37.75	22.25	117.25	95
	46	46	116.5	53	134.5	119.75	125.75	137.00	27.75	28.25	38.25	22.50	117.50	95
	48	48	121.5	55	139.5	125.00	131.00	142.00	28.00	28.50	38.75	22.75	117.75	95
	50	50	127	57	144.5	130.00	136.00	147.25	28.25	28.75	39.25	23.00	118.00	95
	52	52	132	59	149.5	135.00	141.00	152.25	28.50	29.00	39.75	23.25	118.25	95
	54	54	137	61	155	140.00	146.00	157.25	28.75	29.25	40.25	23.50	118.50	95
	56	56	142	63	160	145.00	151.00	162.50	29.00	29.50	40.75	23.75	118.75	95
	58	58	147	65	165	150.00	156.00	167.50	29.25	29.75	41.25	24.00	119.00	95
	60	60	152	67	170	155.00	161.00	172.50	29.50	30.00	41.75	24.25	119.25	95
	TOLERANCE ±					1.5cm	1.5cm	1.5cm	1cm	1cm	1cm	1cm	1.5cm	1.5cm
	MEASUREMENT LOCATION					A	B	C	D	E	F		G	H

NOTE: FINISHED GARMENT MEASUREMENTS ARE SHOWN IN CENTEMETERS ONLY.

SCALES OF MEASUREMENTS – Pants, Cargo, Male (Continued)

SIZE DESIGNATION		BODY MEASUREMENTS				FINISHED GARMENT MEASUREMENTS								
RISE	SIZE	WAIST		SEAT		Waistband Circ. Relaxed	Waistband Circ. Stretched	Seat Circ.	Bottom (½ only)	Front Rise	Back Rise	Crotch Depth (outseam minus inseam)	Outseam (bottom of waistband to hem)	Inseam
		Inches	cm	Inches	cm									
<u>REGULAR RISE</u>	26	26	66	33	84	69.00	75.00	86.25	25.25	27.75	35.25	24.00	122.00	98
	28	28	71	35	89	74.00	80.00	91.25	25.50	28.00	35.75	24.25	122.25	98
	30	30	76	37	94	79.00	85.00	96.25	25.75	28.25	36.25	24.50	122.50	98
	32	32	81	39	99	84.00	90.00	101.50	26.00	28.50	36.75	24.75	122.75	98
	34	34	86	41	104	89.00	95.00	106.50	26.25	28.75	37.25	25.00	123.00	98
	36	36	91	43	109	94.00	100.00	111.50	26.50	29.00	37.75	25.25	123.25	98
	38	38	96.5	45	114	99.50	105.50	116.75	26.75	29.25	38.25	25.50	123.50	98
	40	40	101.5	47	120	104.50	110.50	121.75	27.00	29.50	38.75	25.75	123.75	98
	42	42	106.5	49	124.5	109.50	115.50	126.75	27.25	29.75	39.25	26.00	124.00	98
	44	44	111.5	51	129.5	114.75	120.75	132.00	27.50	30.00	39.75	26.25	124.25	98
	46	46	116.5	53	134.5	119.75	125.75	137.00	27.75	30.25	40.25	26.50	124.50	98
	48	48	121.5	55	139.5	125.00	131.00	142.00	28.00	30.50	40.75	26.75	124.75	98
	50	50	127	57	144.5	130.00	136.00	147.25	28.25	30.75	41.25	27.00	125.00	98
	52	52	132	59	149.5	135.00	141.00	152.25	28.50	31.00	41.75	27.25	125.25	98
	54	54	137	61	155	140.00	146.00	157.25	28.75	31.25	42.25	27.50	125.50	98
	56	56	142	63	160	145.00	151.00	162.50	29.00	31.50	42.75	27.75	125.75	98
	58	58	147	65	165	150.00	156.00	167.50	29.25	31.75	43.25	28.00	126.00	98
	60	60	152	67	170	155.00	161.00	172.50	29.50	32.00	43.75	28.25	126.25	98
		TOLERANCE ±				1.5cm	1.5cm	1.5cm	1cm	1cm	1cm	1cm	1.5cm	1.5cm
		MEASUREMENT LOCATION				A	B	C	D	E	F		G	H

NOTE: FINISHED GARMENT MEASUREMENTS ARE SHOWN IN CENTEMETERS ONLY.

SCALES OF MEASUREMENTS – Pants, Cargo, Male (Continued)

SIZE DESIGNATION		BODY MEASUREMENTS				FINISHED GARMENT MEASUREMENTS								
RISE	SIZE	WAIST		SEAT		Waistband Circ.	Waistband Circ. Stretched	Seat Circ.	Bottom (½ only)	Front Rise	Back Rise	Crotch Depth (outseam minus inseam)	Outseam (bottom of waistband to hem)	Inseam
		Inches	cm	Inches	cm									
<u>TALL</u> <u>RISE</u>	26	26	66	33	84	69.00	75.00	86.25	25.25	29.75	37.25	26.75	127.75	101
	28	28	71	35	89	74.00	80.00	91.25	25.50	30.00	37.75	27.00	128.00	101
	30	30	76	37	94	79.00	85.00	96.25	25.75	30.25	38.25	27.25	128.25	101
	32	32	81	39	99	84.00	90.00	101.50	26.00	30.50	38.75	27.50	128.50	101
	34	34	86	41	104	89.00	95.00	106.50	26.25	30.75	39.25	27.75	128.75	101
	36	36	91	43	109	94.00	100.00	111.50	26.50	31.00	39.75	28.00	129.00	101
	38	38	96.5	45	114	99.50	105.50	116.75	26.75	31.25	40.25	28.25	129.25	101
	40	40	101.5	47	120	104.50	110.50	121.75	27.00	31.50	40.75	28.50	129.50	101
	42	42	106.5	49	124.5	109.50	115.50	126.75	27.25	31.75	41.25	28.75	129.75	101
	44	44	111.5	51	129.5	114.75	120.75	132.00	27.50	32.00	41.75	29.00	130.00	101
	46	46	116.5	53	134.5	119.75	125.75	137.00	27.75	32.25	42.25	29.25	130.25	101
	48	48	121.5	55	139.5	125.00	131.00	142.00	28.00	32.50	42.75	29.50	130.50	101
TOLERANCE ±	50	50	127	57	144.5	130.00	136.00	147.25	28.25	32.75	43.25	29.75	130.75	101
	52	52	132	59	149.5	135.00	141.00	152.25	28.50	33.00	43.75	30.00	131.00	101
	54	54	137	61	155	140.00	146.00	157.25	28.75	33.25	44.25	30.25	131.25	101
	56	56	142	63	160	145.00	151.00	162.50	29.00	33.50	44.75	30.50	131.50	101
	58	58	147	65	165	150.00	156.00	167.50	29.25	33.75	45.25	30.75	131.75	101
	60	60	152	67	170	155.00	161.00	172.50	29.50	34.00	45.75	31.00	132.00	101
						1.5cm	1.5cm	1.5cm	1cm	1cm	1cm	1cm	1.5cm	1.5cm
	MEASUREMENT LOCATION					A	B	C	D	E	F		G	H

NOTE: FINISHED GARMENT MEASUREMENTS ARE SHOWN IN CENTEMETERS ONLY.

SCALES OF MEASUREMENTS – Pants, Cargo, Female

SIZE DESIGNATION		BODY MEASUREMENTS			FINISHED GARMENT MEASUREMENTS									
RISE	SIZE	WAIST		SEAT		Waistband Circ.	Waistband Circ. Stretched	Seat Circ.	Bottom (½ only)	Front Rise	Back Rise	Crotch Depth (outseam minus inseam)	Outseam (bottom of waistband to hem)	Inseam
		Inches	cm	Inches	cm									
<u>SHORT RISE</u>	24	24	61	31	78.5	64.00	70.00	81.00	23.25	23.00	32.00	19.00	109.00	90
	26	26	66	33	84	69.00	75.00	86.00	23.50	23.25	32.25	19.25	109.25	90
	28	28	71	35	89	74.00	80.00	91.00	23.75	23.50	32.50	19.50	109.50	90
	30	30	76	37	94	79.00	85.00	96.00	24.00	23.75	32.75	19.75	109.75	90
	32	32	81	39	99	84.00	90.00	101.50	24.25	24.00	33.00	20.00	110.00	90
	34	34	86	41	104	89.00	95.00	106.50	24.50	24.25	33.25	20.25	110.25	90
	36	36	91	43	109	94.00	100.00	111.50	24.75	24.50	33.50	20.50	110.50	90
	38	38	96.5	45	114	99.50	105.50	116.75	25.00	24.75	33.75	20.75	110.75	90
	40	40	101.5	47	120	104.50	110.50	121.75	25.25	25.00	34.00	21.00	111.00	90
	42	42	106.5	49	124.5	109.50	115.50	127.00	25.50	25.25	34.25	21.25	111.25	90
	44	44	111.5	51	129.5	114.75	120.75	132.00	25.75	25.50	34.50	21.50	111.50	90
	46	46	116.5	53	134.5	119.75	125.75	137.00	26.00	25.75	34.75	21.75	111.75	90
TOLERANCE ±	48	48	121.5	55	139.5	125.00	131.00	142.00	26.25	26.00	35.00	22.00	112.00	90
	50	50	127	57	144.5	130.00	136.00	147.00	26.50	26.25	35.25	22.25	112.25	90
	52	52	132	59	149.5	135.00	141.00	152.00	26.75	26.50	35.50	22.50	112.50	90
	54	54	137	61	155	140.00	146.00	157.00	27.00	26.75	35.75	22.75	112.75	90
	56	56	142	63	160	145.00	151.00	162.50	27.25	27.00	36.00	23.00	113.00	90
	58	58	147	65	165	150.00	156.00	167.50	27.50	27.25	36.25	23.25	113.25	90
	60	60	152	67	170	155.00	161.00	172.50	27.75	27.50	36.50	23.50	113.50	90
	TOLERANCE ±					1.5cm	1.5cm	1.5cm	1cm	1cm	1cm	1cm	1.5cm	1.5cm
	MEASUREMENT LOCATION					A	B	C	D	E	F		G	H

NOTE: FINISHED GARMENT MEASUREMENTS ARE SHOWN IN CENTIMETERS ONLY.

SCALES OF MEASUREMENTS – Pants, Cargo, Female (Continued)

SIZE DESIGNATION		BODY MEASUREMENTS				FINISHED GARMENT MEASUREMENTS								
RISE	SIZE	WAIST		SEAT		Waistband Circ.	Waistband Circ. Stretched	Seat Circ.	Bottom (½ only)	Front Rise	Back Rise	Crotch Depth (outseam minus inseam)	Outseam (bottom of waistband to hem)	Inseam
		Inches	cm	Inches	cm									
<u>REGULAR</u> <u>RISE</u>	24	24	61	31	78.5	64.00	70.00	81.00	23.25	25.00	34.00	21.00	114.00	93
	26	26	66	33	84	69.00	75.00	86.00	23.50	25.25	34.25	21.25	114.25	93
	28	28	71	35	89	74.00	80.00	91.00	23.75	25.50	34.50	21.50	114.50	93
	30	30	76	37	94	79.00	85.00	96.00	24.00	25.75	34.75	21.75	114.75	93
	32	32	81	39	99	84.00	90.00	101.50	24.25	26.00	35.00	22.00	115.00	93
	34	34	86	41	104	89.00	95.00	106.50	24.50	26.25	35.25	22.25	115.25	93
	36	36	91	43	109	94.00	100.00	111.50	24.75	26.50	35.50	22.50	115.50	93
	38	38	96.5	45	114	99.50	105.50	116.75	25.00	26.75	35.75	22.75	115.75	93
	40	40	101.5	47	120	104.50	110.50	121.75	25.25	27.00	36.00	23.00	116.00	93
	42	42	106.5	49	124.5	109.50	115.50	127.00	25.50	27.25	36.25	23.25	116.25	93
44	44	111.5	51	129.5	114.75	120.75	132.00	25.75	27.50	36.50	23.50	116.50	93	
46	46	116.5	53	134.5	119.75	125.75	137.00	26.00	27.75	36.75	23.75	116.75	93	
48	48	121.5	55	139.5	125.00	131.00	142.00	26.25	28.00	37.00	24.00	117.00	93	
50	50	127	57	144.5	130.00	136.00	147.00	26.50	28.25	37.25	24.25	117.25	93	
52	52	132	59	149.5	135.00	141.00	152.00	26.75	28.50	37.50	24.50	117.50	93	
54	54	137	61	155	140.00	146.00	157.00	27.00	28.75	37.75	24.75	117.75	93	
56	56	142	63	160	145.00	151.00	162.50	27.25	29.00	38.00	25.00	118.00	93	
58	58	147	65	165	150.00	156.00	167.50	27.50	29.25	38.25	25.25	118.25	93	
60	60	152	67	170	155.00	161.00	172.50	27.75	29.50	38.50	25.50	118.50	93	
		TOLERANCE ±				1.5cm	1.5cm	1.5cm	1cm	1cm	1cm	1cm	1.5cm	1.5cm
		MEASUREMENT LOCATION				A	B	C	D	E	F		G	H

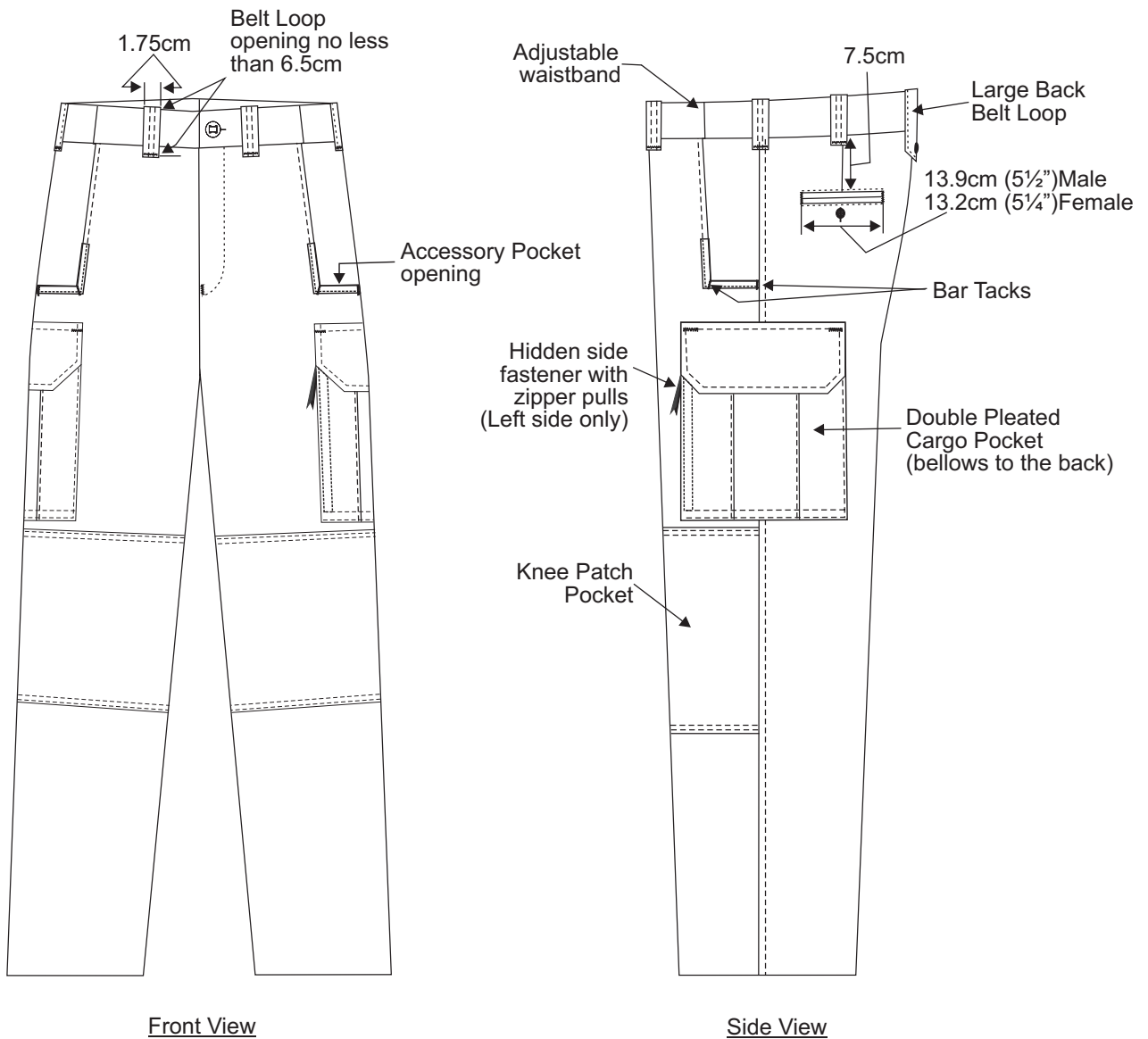
NOTE: FINISHED GARMENT MEASUREMENTS ARE SHOWN IN CENTIMETERS ONLY.

SCALES OF MEASUREMENTS – Pants, Cargo, Female (Continued)

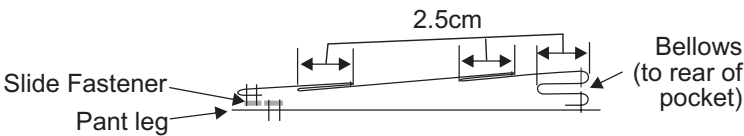
SIZE DESIGNATION		BODY MEASUREMENTS				FINISHED GARMENT MEASUREMENTS								
RISE	SIZE	WAIST		SEAT		Waistband Circ.	Waistband Circ. Stretched	Seat Circ.	Bottom (½ only)	Front Rise	Back Rise	Crotch Depth (outseam minus inseam)	Outseam (bottom of waistband to hem)	Inseam
		Inches	cm	Inches	cm									
TALL RISE	24	24	61	31	78.5	64.00	70.00	81.00	23.25	27.00	36.00	23.00	119.00	96
	26	26	66	33	84	69.00	75.00	86.00	23.50	27.25	36.25	23.25	119.25	96
	28	28	71	35	89	74.00	80.00	91.00	23.75	27.50	36.50	23.50	119.50	96
	30	30	76	37	94	79.00	85.00	96.00	24.00	27.75	36.75	23.75	119.75	96
	32	32	81	39	99	84.00	90.00	101.50	24.25	28.00	37.00	24.00	120.00	96
	34	34	86	41	104	89.00	95.00	106.50	24.50	28.25	37.25	24.25	120.25	96
	36	36	91	43	109	94.00	100.00	111.50	24.75	28.50	37.50	24.50	120.50	96
	38	38	96.5	45	114	99.50	105.50	116.75	25.00	28.75	37.75	24.75	120.75	96
	40	40	101.5	47	120	104.50	110.50	121.75	25.25	29.00	38.00	25.00	121.00	96
	42	42	106.5	49	124.5	109.50	115.50	127.00	25.50	29.25	38.25	25.25	121.25	96
	44	44	111.5	51	129.5	114.75	120.75	132.00	25.75	29.50	38.50	25.50	121.50	96
	46	46	116.5	53	134.5	119.75	125.75	137.00	26.00	29.75	38.75	25.75	121.75	96
	48	48	121.5	55	139.5	125.00	131.00	142.00	26.25	30.00	39.00	26.00	122.00	96
	50	50	127	57	144.5	130.00	136.00	147.00	26.50	30.25	39.25	26.25	122.25	96
	52	52	132	59	149.5	135.00	141.00	152.00	26.75	30.50	39.50	26.50	122.50	96
	54	54	137	61	155	140.00	146.00	157.00	27.00	30.75	39.75	26.75	122.75	96
	56	56	142	63	160	145.00	151.00	162.50	27.25	31.00	40.00	27.00	123.00	96
	58	58	147	65	165	150.00	156.00	167.50	27.50	31.25	40.25	27.25	123.25	96
	60	60	152	67	170	155.00	161.00	172.50	27.75	31.50	40.50	27.50	123.50	96
	TOLERANCE ±					1.5cm	1.5cm	1.5cm	1cm	1cm	1cm	1cm	1.5cm	1.5cm
	MEASUREMENT LOCATION					A	B	C	D	E	F		G	H

NOTE: FINISHED GARMENT MEASUREMENTS ARE SHOWN IN CENTEMETERS ONLY.

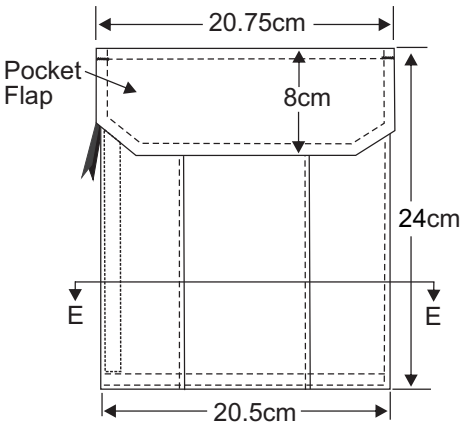
APPENDIX
Pants, Cargo, Male & Female
CBSA/ASFC-2012-09-110
Dwg. 1



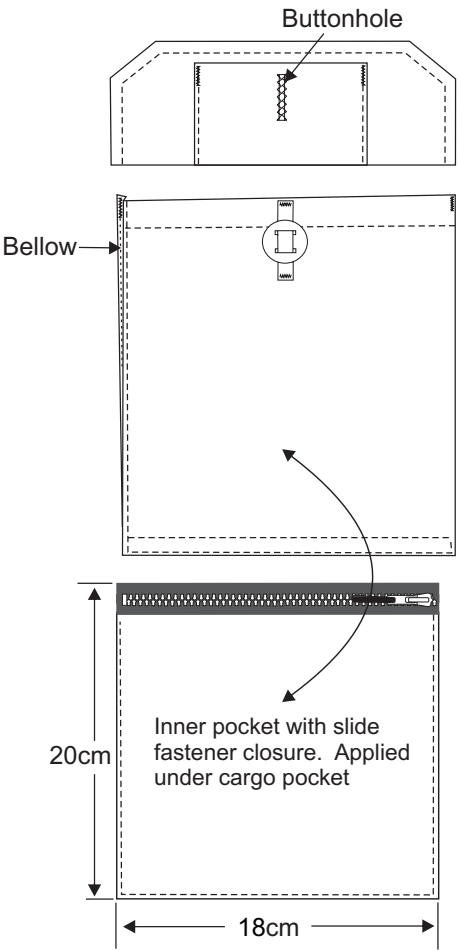
All Measurements in Centimeters
NOT TO SCALE



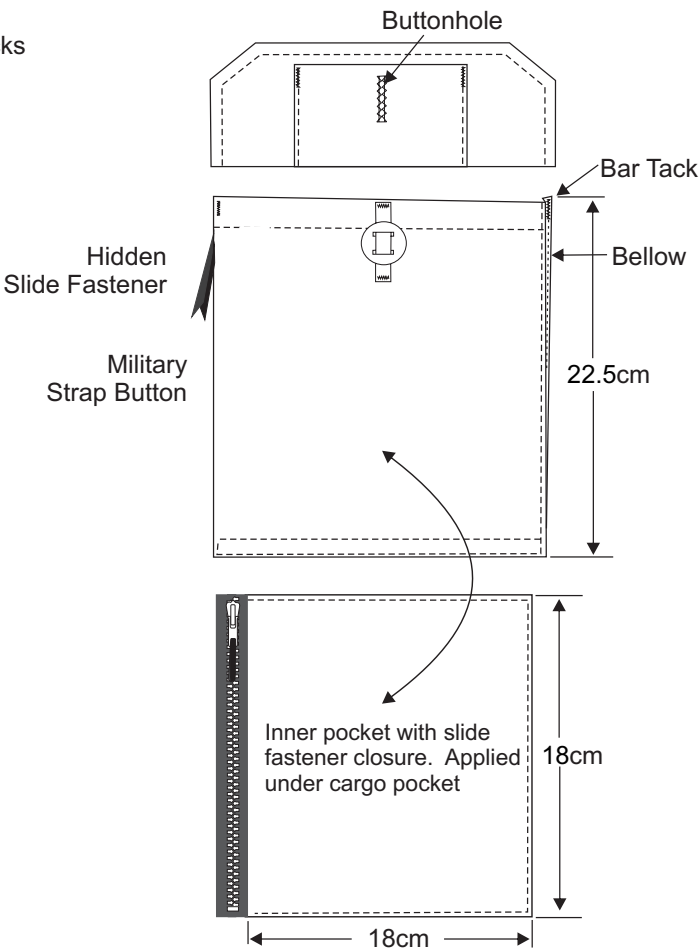
Section E-E
Left Cargo Pocket

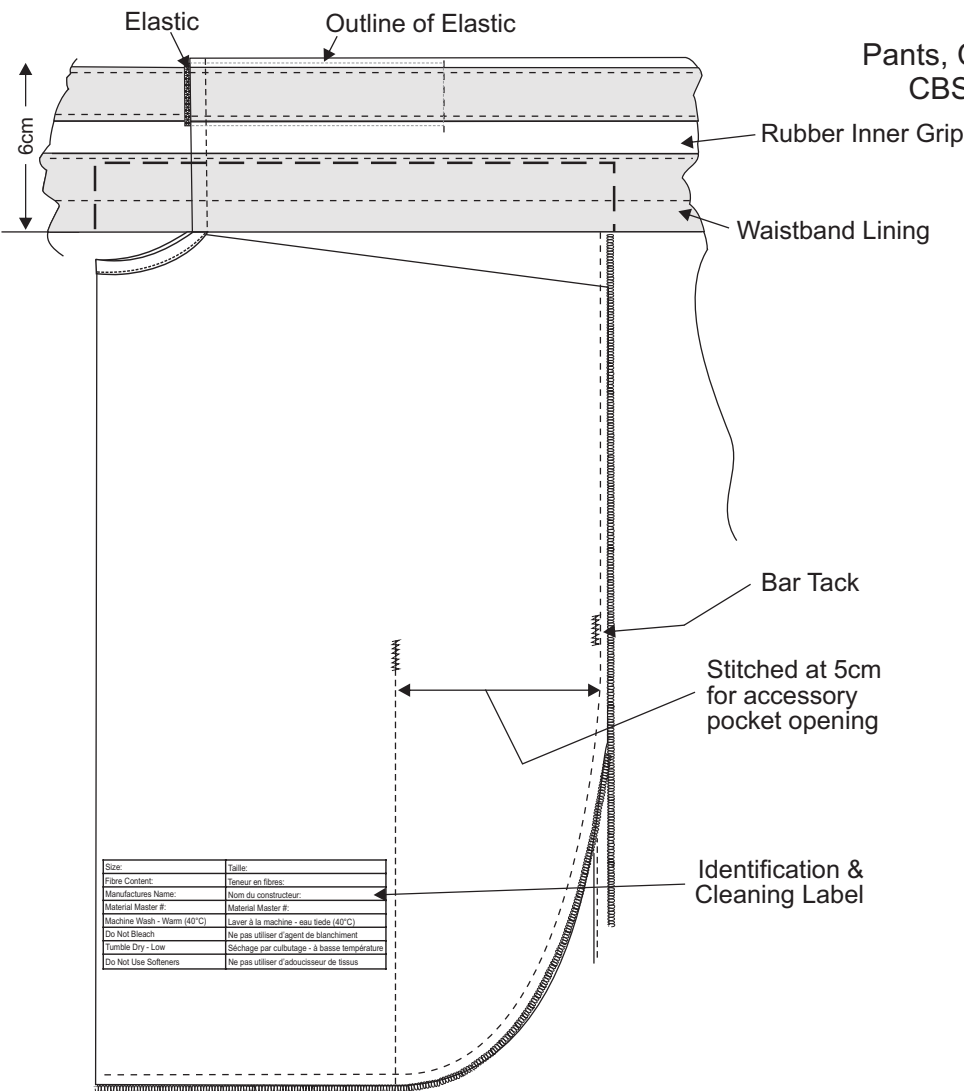


Left Cargo Pocket

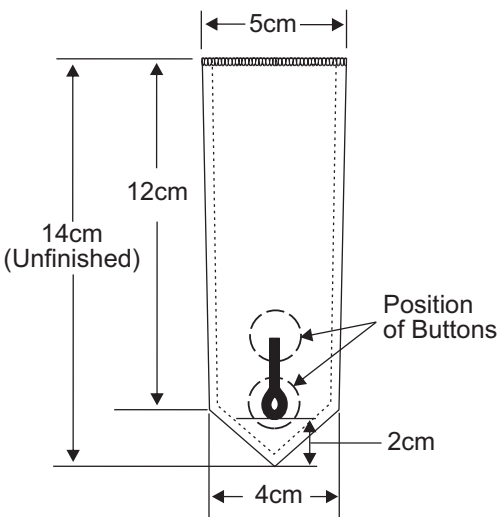


Bar Tacks



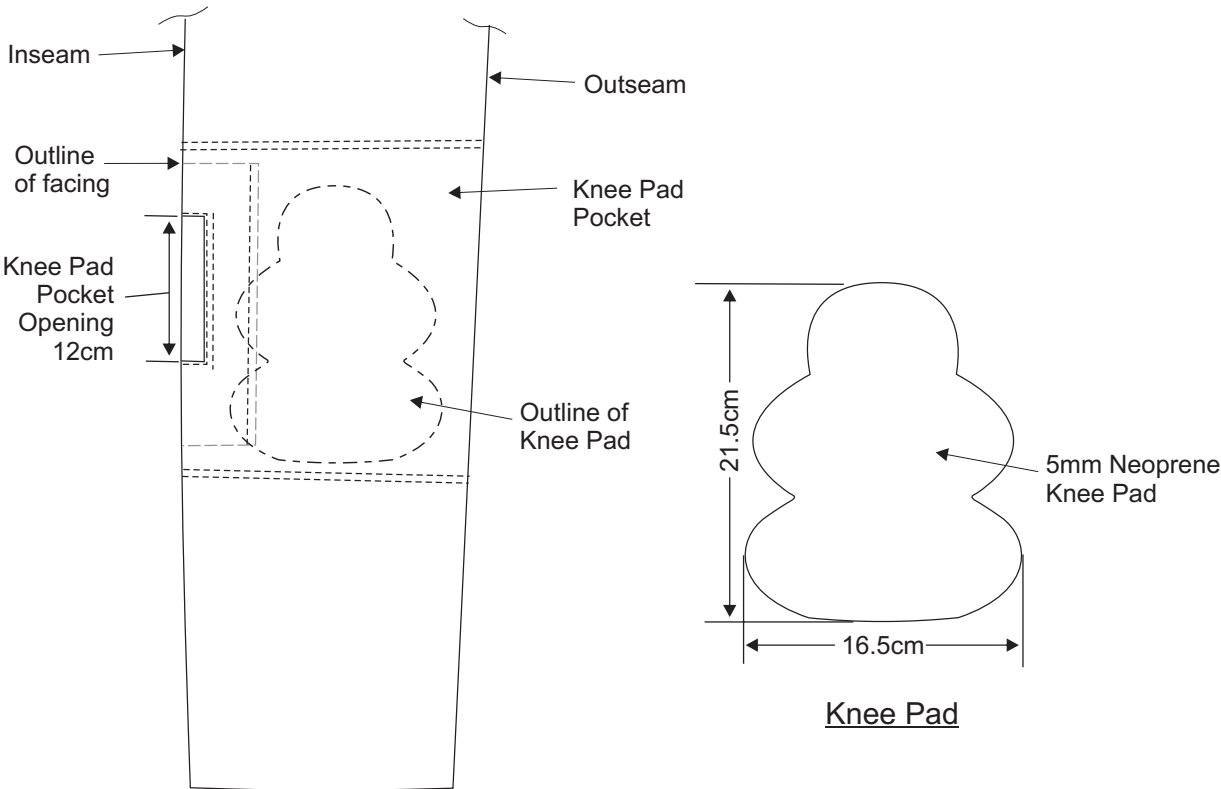


Front Pocket & Adjustable Waistband Detail



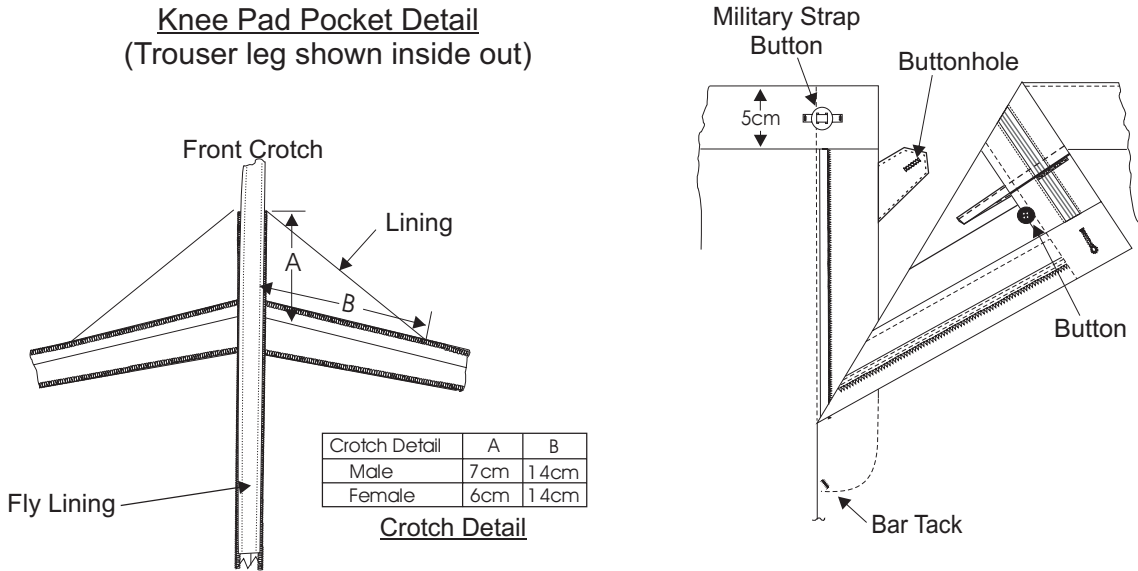
Back Belt Loop

All Measurements in Centimeters
NOT TO SCALE



Knee Pad Pocket Detail

(Trousler leg shown inside out)



Inside View - Back Crotch

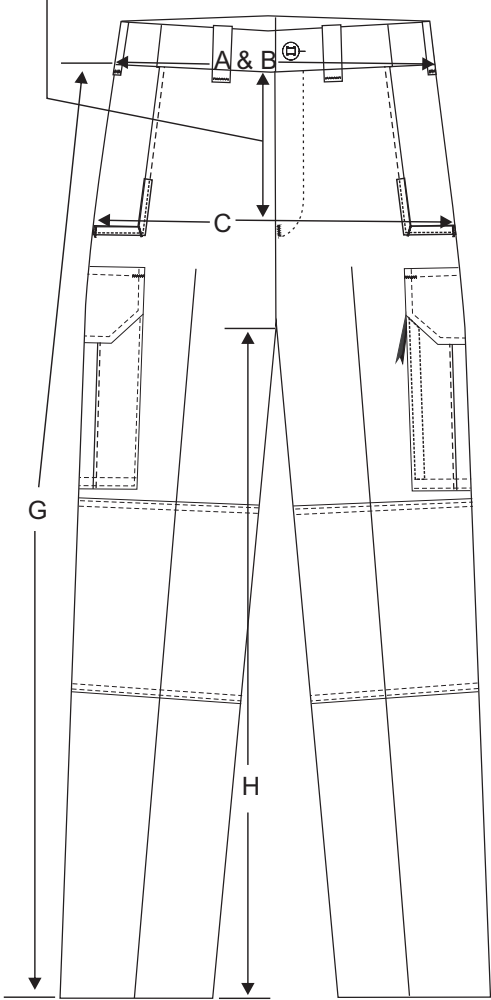
(Fly lining continues to seat curve)

Fly Detail

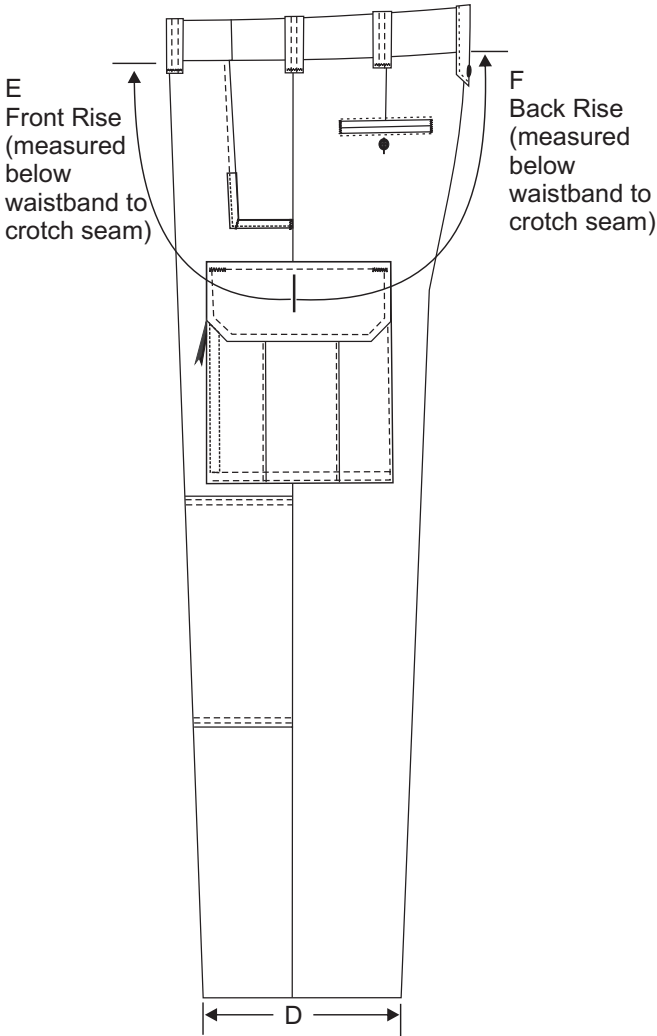
Measurement Location

Distance from below the bottom of the waistband to measure seat circumference

	Male	Female
Xshort		12.7
Short	17.15	14
Regular	18.4	15.25
Tall	19.7	16.5
Xtall	21	



Front View



Side View